

1 Q. **Reference: CBA, Rev. 1, vol. II, Wabush Terminal Station Upgrades, Attachment 3, Lab West**
2 **System Expansion Study, Wabush Terminal Station Recommended Upgrades, page 9 (p. 455**
3 **pdf)**

4 Citation:

5 Due to the split bus configuration of the Wabush Terminal Station, the
6 transformer capacity is evaluated on a per-bus basis. The non-firm transformer
7 capacity for each 46 kV bus is 278.3 MVA, while the firm transformer capacity
8 for each bus is 195 MVA.

9 Bus B2 typically carries 57% of the station's total load, as it supplies IOC,
10 Wabush Mines, and the Town loads, whereas B1 only supplies IOC load.
11 Therefore, for the Peak P90 Forecast case for 2045–2046, the total load supplied
12 on B2 would be 228 MVA which exceeds the firm transformer capacity for B2.

13 Therefore, there is a violation to Transmission Planning Criteria as there is
14 insufficient power transformer capacity to meet peak forecasted load for n-1
15 contingency situations. As is the case for all other Hydro terminal stations, such
16 a violation would trigger the requirement for the installation of additional
17 power transformer capacity. This requirement is further justified in the
18 following sections.

19 a. Please confirm that:

20 i. IOC is served by both Bus B1 and Bus B2, and that all other Wabush Terminal Station
21 loads are served by Bus B2, and

22 ii. the value of 228 MVA was determined by multiplying the typical value of 57% to the
23 forecast P90 load.

24 b. Please indicate if there is any possibility of transferring more of IOC's load to Bus B1 in order
25 to free more capacity for load growth in the areas served by Bus B2. If so, please describe in
26 general terms what works would be required to do so.

- 1 A.
- 2 **a.**
- 3 **i.** It is confirmed that Iron Ore Company of Canda (“IOC”) is served by both Bus B1 and
4 Bus B2 and all other Wabush Terminal Station loads are served by Bus B2.
- 5 **ii.** It is confirmed that the value of 228 MVA was determined by multiplying the
6 forecasted P90 load for 2045-2046 by 57%.
- 7 **b.** The analysis has included IOC’s capability for load transfer to Bus B1. IOC has the ability
8 to transfer feeder L5 from Bus B2 to Bus B1 which represents a 64 MW load at peak.
9 This load was modeled on Bus B1 for the purposes of maximizing power transfer in this
10 analysis.